



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/683,905	10/10/2003	Kim R. Smith	163.1797US01	3088
43896	7590	09/27/2006	EXAMINER	
ECOLAB INC. MAIL STOP ESC-F7, 655 LONE OAK DRIVE EAGAN, MN 55121			DEL COTTO, GREGORY R	
			ART UNIT	PAPER NUMBER

1751

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/683,905

Applicant(s)

SMITH, KIM R.

Examiner

Gregory R. Del Cotto

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on RCE filed 8/31/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14, 15 and 17-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14, 15, 17-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-15 and 17-26 are pending. Claim 16 has been canceled. Applicant's arguments and amendments filed 8/31/06 have been entered.

The Examiner asserts that the broad terminology "builder" and "alkalinity source" as recited by instant claim 18 overlap in scope and both may represent the same compound such as sodium carbonate, sodium phosphate, etc.

Claims 1-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3/22/06.

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/31/06 has been entered.

### **Objections/Rejections Withdrawn**

The following objections/rejections set forth in the Office action mailed 6/1/06 have been withdrawn:

The rejection of claims 14, 15, and 17-25 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, has been withdrawn.

The rejection of claims 14, 15, and 17-25 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, has been withdrawn.

The rejection of claims 14, 15, and 17-25 under 35 U.S.C. 103(a) as being unpatentable over Man et al (US 2003/0087787).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Art Unit: 1751

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 14, 15, and 17-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/24854 in view of Man et al (US 2003/0087787), Woo et al (US 2003/0191034), or Man et al (US 6,624,132).

'854 teaches improved aqueous carpet cleaning compositions which are ideally suited for use in machinery designed or used in the mechanical cleaning of carpets. The compositions are alkaline, and include one or more deterative surfactants, preferably one or more nonionic surfactants and one or more anionic surfactants, at least about 2% by weight of aminopolycarboxylic acid salt, an organic solvent constituent, an anti-resoiling agent, as well as further optional constituents. See

Art Unit: 1751

Absract. Suitable surfactants include anionic, cationic, nonionic, amphoteric surfactants, etc. The most preferred anionic surfactants include alkylated naphthalene sulfates, and alkylated naphthalene sulfonates which fall under the category of anionic hydrotropes. See page 4, lines 10-30. Suitable nonionic surfactants include alkoxy block copolymers based on ethoxy/propoxy block copolymers under the tradename Pluronic, amine oxides, etc. See page 4, line 30 to page 6, line 25. Optional components present in the composition include preservatives, pH buffers, etc. Suitable pH buffers include alkali metal silicates, carbonates, etc. See page 10, line 1 to page 11, line 15. The optional components should not exceed about 20% by weight of the composition. See page 18, lines 1-15. Suitable aminopolycarboxylic acid salts include EDTA and salts thereof. See page 21, lines 1-30.

The method of cleaning carpet fibers, carpets, and carpeted surfaces such as on walls, floors and the like which comprises the step of providing to such a machine the compositions and utilizing the machine in the cleaning of said fibers, carpets or carpeted floors. See page 2, lines 15-30. The compositions may be conveniently applied to a substrate by spraying, dipping, coating, padding, foam or roller application, etc., which would suggest brushing or rubbing as recited by the instant claims. See page 19, line 20 to page 20, line 15. Typically, a machine is provided with a nozzle wherein the diluted composition is sprayed onto a carpet surface, is optionally but desirably agitated by brushes or other agitator means forming part of the machine, and then vacuumed. See page 20, lines 5-15. Note that, the Examiner has interpreted claim 17 which recites

Art Unit: 1751

removing a portion of the composition from the surface as being the same as rinsing a portion of the composition from the surface which is clearly suggested by '854.

'854 does not teach the use of a reverse EO/PO copolymer, cocoamidopropyl betaine surfactant, or a method of cleaning using a cleaning composition containing a reverse EO/PO copolymer, an amphoteric surfactant, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Man et al teach liquid enzyme cleaning compositions in which the enzyme is stable at alkaline pH. Water is present in a concentration of at least 60% by weight. See Abstract. In one embodiment, the composition include an amphoteric surfactant, a nonionic surfactant, and/or cationic surfactant, a protease, propylene glycol, a builder such as EDTA, dye, hydrotrope, etc. The composition may be used for cleaning carpets, laundry, textiles, etc. See para. 51.

Generally, the concentration of surfactant mixture useful in stabilizing liquid enzyme compositions fall in the range of from about 0.5 to about 40% by weight of the composition. Suitable surfactants include block polyoxypropylene-polyoxyethylene polymeric compounds based upon propylene glycol, ethylene glycol, reverse copolymers of EO/PO, etc., known under the tradename Pluronic, condensation products of one mole of a saturated or unsaturated, straight or branched chain alcohol having from about 6 to about 24 carbon atoms with about from 3 to 50 moles of ethylene oxide, etc. See paras. 80-108. Amphoteric or ampholytic surfactants such as cocoamphopropionate, cocamphocarboxy-propionic acid, etc., may also be used in the

Art Unit: 1751

compositions. See paras. 171-176. The surfactants can be used singly or in combination and the amphoteric surfactants can be used in combination with nonionics or anionics. See para. 190. Builders are also used in the compositions and include alkali metal salts of silicates, carbonates, phosphates, etc. Polycarboxylate builders may also be used including citric acid, citrate, etc. See para. 194-196. Hydrotropes may also be used in the compositions including anionic surfactants such as alkyl sulfate, alkyl or alkane sulfonate, etc. See paras. 200-203.

'132 teaches a liquid cleaning composition suitable for cleaning laundry and textiles, carpet cleaning and destaining, etc. See column 6, lines 49-65. Suitable nonionic surfactants include Pluronic compounds which are EO/PO copolymers and reverse Pluronic compounds, etc. See column 16, line 20 to column 17, line 40.

Woo et al teach a method of deodorizing and/or reducing malodor in carpet which comprises the step of contacting the carpet with a deodorizing composition comprising an effective amount of odor control agent. Suitable surfactants include Pluronic surfactants and reverse Pluronic surfactants which are EO/PO copolymer compounds, etc. See paras. 147-155. In a preferred embodiment of the invention, a method of deodorizing carpet comprises the steps of placing a concentrated deodorizing composition, diluted deodorizing composition, and/or combined deodorizing and cleaning composition in a carpet extractor and then using the carpet extractor to clean the carpet. See para. 343. Additionally, the composition may be packaged in a container such as a trigger spray bottle and applied to the surface through spraying. See paras. 350-360.



It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a reverse EO/PO surfactant (reverse Pluronic) in the cleaning composition taught by '854, with a reasonable expectation of success, because '787, '034, or '132 teaches the equivalence of Pluronic surfactants to reverse Pluronic surfactants in a similar cleaning composition and further, '787, '034, or '132 teach the use of Pluronic surfactants.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use cocamidopropylbetaine in the composition taught by '854, with a reasonable expectation of success, because '787 teaches the use of cocamidopropylbetaine in a similar cleaning composition and further, '854 teaches the use of amphoteric surfactants in general.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to clean a substrate using a cleaning composition containing a reverse EO/PO copolymer, an amphoteric surfactant, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because the broad teachings of '854 in combination with '787, '034, or '132 suggest a method of cleaning using a cleaning composition containing an EO/PO copolymer, an amphoteric surfactant, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

### ***Response to Arguments***

With respect to WO00/24854, Applicant states that this reference is not applicable because '854 does not teach the use of a reverse EO/PO copolymer surfactant as recited by the instant claims. In response, note that, a new rejection using '854 in combination with Man et al (US 2003/0087787), Woo et al (US 2003/0191034), or Man et al (US 6,624,132) has been made over all the claims, as set forth above, and the Examiner maintains that this combination is sufficient to suggest the claimed invention.

### ***Conclusion***

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.


Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571) 272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1751

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Gregory R. Del Cotto  
Primary Examiner  
Art Unit 1751

GRD  
September 21, 2006